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## Subject Gateways: An Overview

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### **Abstract**

*Libraries have been undergoing tremendous developments in this era, adapting to the advent of information technology in the day to day working. Electronic, Digital Libraries have arrived. OPAC, CDROM databases, Electronic journals and Internet access exist in most Libraries. Libraries are no longer storehouses but are becoming gateways of relevant information. Some progress has been made towards increasing the relevancy of the data with the induction of various search engines and subject directories. Despite these activities, information sources remain scattered, hard to find and difficult to access. With the Internet, WWW and Information explosion, identification and extraction of information resources is an essential function of all libraries and information centers. The Electronic information sources are rapidly growing and with a wide variety in form and content it takes a lot of time to get the required information. Using technology the institutions, associations and individuals build a kind of network resource discovery service, called "Subject Gateways" on the web, which is de-facto network use environment. These subject gateways evolved during the last five years among early digital library projects within the library communities of the various countries. Subject gateways allow libraries and related organizations to explore the usefulness of their subject expertise in the organization of knowledge in the word of network-based, Digital information. This paper gives an overview of the subject gateways, its definitions, feature and lastly some useful subject gateways and their services.*

**Keywords :** Subject Gateways, Portal, Information Services

### **0. Introduction**

Subject gateways do not exist in isolation. For the user they form part of the wider experience of resource discovery. On the one hand, the searcher whether child or professor is faced with the compelling option of using the global services, such as Yahoo, Altavista, and Google, as a first step. The Undifferentiated experience offered by such services can be compared with the specialist view offered by information gateways. Gateways offer the user an alternative to the generalist approach of the commercial global search engines, but in order to optimize the gateway service we need to gain a better understanding of users' requirements for particular types of search during the research and learning process. It would be instructive to compare information seeking behaviour and success rates for a variety of uses of global search engine as compared to gateways. Likewise one could analyse the differences in users' search strategies within the context of the traditional library, hybrid library and subject gateway. It may be helpful to liken the subject gateway approach to the traditional "departmental library" as the user's first port of call, a place where the user feels comfortable in a known environment and is able to gain skills to navigate a limited area of information. It would be interesting to see how far we could draw parallels between the requirements of users of subject gateways and the users of "subject based" libraries.

The users of both services benefit from an understanding of the boundaries and content of the information space they are accessing. It is important to connect user behaviour regarding Internet resource discovery with wider issues relating to the use of information in the learning and research processes. What does the user want from the research experience? Understanding users' behaviour in relation to gateways will enable gateway managers to position themselves within the mesh of existing gateways and meet the needs of their target audiences.

## 1. Why Gateways?

- ✍ Innovative ways of providing information and services such as electronic resources, course specific, and library help pages and document delivery.
- ✍ Complex library searches due to the cross functions and links between the online catalog, journal aggregator databases, electronic resources etc..
- ✍ The need to identify and present high quality free information resources on the web and distinguish those from library licensed material.
- ✍ The increasing expectations of users for interfaces to lead directly, without undue hunting, to the information or service they need.
- ✍ Many library web sites get congested with ample content, general objectives and duplication of services. It is no longer simple and clear how to do research or projects with a tool that provides gateways for getting information. There are number of steps that a library researcher must perform to successfully get information. Thus Gateways are needed to improve the effectiveness of Internet searching and will serve as a source of information in specific areas and saves the time of the users.

## 2. What are Gateways?

Moffat describes the establishment of the gateways as “a process of identification, filtering description, classification and indexing before they are added to databases which is freely available via World Wide Web (WWW).

- ✍ an online service that provides links to numerous other sites or documents on the Internet
- ✍ selection of resources in an intellectual process according to published quality and scope criteria (this excludes e.g. selection according to automatically measured popularity)
- ✍ Intellectually produced content descriptions, in the spectrum between short annotation and review (this excludes automatically extracted so-called summaries). A good but not necessary criterion is the existence of intellectually assigned keywords or controlled terms.
- ✍ intellectually constructed browsing structure/classification (this excludes completely unstructured lists of links)
- ✍ at least partly, manually generated (bibliographic) metadata for the individual resources

So we can say the internet search tools to help people find resources on the internet, e.g. electronic journals, software, data sets, e-books, mailing lists or discussion groups, articles or papers or reports, bibliographies, bibliographical databases, organizational home pages, educational materials, news, resource guides and more.

Gateways offer linked collection of internet resources via a database of resource description. This can be

- ✍ Browsed - according to broad classification
- ✍ Searched - through index
- ✍ Quality controlled - due to selection

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### 3. What are Subject Gateways?

Subject Gateway is an organized collection of resources on a given subject along with a retrieval mechanism. This essentially means that the scope of the search domain is well defined and limited to a subset of what exists in general. In the simplest form, the resources may be made available as a structured hyper-linked directory as followed by some of the search engines sites that offer directory services. The structuring followed is mostly only by broad subject areas. But for arranging topics under research areas where the intension of the subject areas is narrow and specific, broad directory structuring would not serve the purpose. Representation of subjects to that extent involves deploying various skills in the area of secondary information work such as document description, classification and derivation of subject headings

Subject Gateways is allowing links amongst electronic resources stored on services dispersed geographically on distant locations. The gateways sites redirect a user to the holders of the original digital material. A subject gateway can be defined as facilities that allow easier access to web-based resources in a defined subject area. The simplest types of subject gateways are sets of web pages containing list of links to resources. Some gateways index their lists of links and provide a simple search facility. More advanced gateways offer a much enhanced service via a system consisting of a resource database and various indexes, which can e searched and / or browse throughout a web based interface.

Subject gateways are also known as:

- ✍ Subject -based information gateways (SBIGs)
- ✍ Subject based gateways
- ✍ Subject index gateways
- ✍ Virtual libraries
- ✍ Clearinghouse
- ✍ Subject trees
- ✍ Pathfinders
- ✍ Quality : controlled subject gateways etc.

#### 3.1 Subject Gateways Definition:

According to Dempsey L and other that "Subject gateways are internet services which supports systematic resource discovery. They provide links to resources (documents, objects, sites or services) predominantly accessible via the internet. The service is base on resource description. Browsing access to the resource via subject structure is an important feature."

#### 3.2 Subject Gateways are characterized by key factors:

- ✍ They are selective, pointing only to internet resources that meet with quality selection criteria.
- ✍ They are built by subject and information specialists - often librarians.
- ✍ Generally limit to specific subjects
- ✍ Scope-policy declaring what subjects they are indexing
- ✍ Defined target group e.g. academics, researchers, etc.

- ✗ Quality criteria - there is an official set of quality criteria
- ✗ Classification system - used as underlying system for browsing possibilities
- ✗ Use of open standards - to support co-operation with other services e.g. cross-searching
- ✗ Manually created records - rich resource description containing relevant information

### 3.3 Historical Development of Subject Gateways:

The subject gateways emerged in response to the challenge of resource discovery in a fast developing internet environment in the early and mid 1990's. Due to the emergence of the network information retrieval systems (Gopher, WWW, Archive, netfirst, etc.) and access protocols (ftp,gopher,telnet, http, etc.) innovative information technologies and services emerge.

The electronic libraries programme (e-Lib) of JISC of the UK Higher Education Funding Council set up in 1995, which includes besides other things, access to network resources (ANR) and subject gateways, were funded as the part of ANR area and latter on it latter on it lead to the funding and establishment of eLib subject gateways.

Different between Search Engine and Subject Gateways

Search Engine	Subject Gateways
General resource is available	It is a gathering place of discipline specific resources
It totally depends on the powerfulness of the lected search-engines algorithms.	High level of human input is there, as the se-resources must meet a number. of criteria applied by a librarian or academic, who ensures that only high quality, relevant resources are included in the database.
The results can be overwhelming, unmanageable, and full of irrelevant references and are often too prolific to meet user needs.	The results are specific, precise and linked to relevant documents.
Records are created by an automatic process and typically consist of mixture of metadata offered by the author of the page (if this is available) and text picked up from the page itself.	Records are created by a cataloguer, which is designed to highlight the main feature of resource in an easily readable, concise fashion.
Entries are displayed more as "raw-data"	Entries are described in a more "human- read able fashion"
In indexes pages.	It indexes resources.

### 3.4 Why Libraries should go for Subject Gateways?

Libraries are the most suitable institution to undertake this work due to the following reasons:

The natural metaphor

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- ✍ Browsing, reference desk
  - ✍ Expertise in releveant area
  - ✍ Classification, acquisition, keyword
  - ✍ Information, seeking behavior
  - ✍ Guiding & helping users

#### Benefits of Gateways for Libraries and Users

- ✍ Leading the way into the information age
- ✍ Communicating with non-nerds
- ✍ Access to huge-high quality collection
- ✍ Integrate into existing structures on the internet
- ✍ Diverse resource brought together
- ✍ Research, learning, leisure, enrichment - all brought together
- ✍ Someone to ask - what's where?
- ✍ What's good?

#### **4. Key Initiatives for building tools and standards in Subject Gateways:**

##### 4.1 ROADS (Resource Organisation and Discovery in subject-based Services)

It is being funded by the JISC (Joint Information System Committee) through e-lib programme. It is an open source set of software toolkit, which enable the set up and maintenance of web-based subject gateways. A ROAD based information gateways is based on a database that contains information about internet resources. The records in the database contain information such as description and keywords. The user is given access to this information while either browsing or searching the database. This is particularly important fir geographically distant resources that might require some time and effort to access. The software includes the database technology, required to set up a gateways. For downloading the free online software visit its site URL: <http://www.ilt.bris.ac.uk/road>

##### 4.2 DESIRE (Development of a European Service for Information on Research and Education)

This is one of the largest projects funded by the Telematics for Research Sector of the Fourth Framework Programme funded by the European Union. In particular, DESIRE intends to provide:

- ✍ Tools for indexing and cataloguing information servers
- ✍ Tools for management and maintenance if information servers
- ✍ Demonstration and evaluation of tools and techniques for information catching and secure access to information servers
- ✍ Background information for developers of networked information systems
- ✍ Training materials

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DESIRE published the "Information Gateways Handbook" a guide for libraries interested in setting up large-scale subject gateways of their own. This handbook is freely available at the site: (<http://www.desire.org>) and describes all the methods and tools require to set up a large scale internet subject gateways.

## 5. Subject or Portal Gateways

Subject gateways or portal variably called subject-based information gateways (SBIGs), subject-based gateways, subject index gateways, virtual libraries, clearing houses, subject trees, pathfinders, guide to Internet resources, and a few more variations thereof, provides an organized and structured guide to Internet-based electronic information resources that are carefully selected after a predefined process of evaluation and filtration in a given subject area or specialty. Subject gateways redirect a user to the holders of the original digital material. The subject gateways restrict their operation to providing linkages to independent third party sources.

Some of the important subject gateways are as follows:

- ✂ LibrarySpot.com: (<http://www.libraryspot.com/>)
- ✂ Librarians' Index to the Internet (LII) (<http://lii.org/>)
- ✂ Argus Clearing House (<http://www.clearinghouse.net/>)
- ✂ Galaxy (<http://galaxy.einet.net/>)
- ✂ Direct Search (<http://gwis2.circ.gwu.edu/~gprice/direct.htm>)
- ✂ Vlib: The Virtual Library (<http://www.vlib.org/>)
- ✂ Academic Info (<http://www.academicinfo.com/>)
- ✂ BUBL (<http://bubl.ac.uk/>)
- ✂ BIOME (<http://biome.ac.uk/>)
- ✂ The Scout Report (<http://scout.cs.wisc.edu/report/sr/current/>)
- ✂ LivingInternet.com (<http://www.livinginternet.com/>)
- ✂ Edinburgh Engineering Virtual Library (EEVL) (<http://www.eevl.ac.uk>)
- ✂ Social Science Information Gateway (SOSIG) (<http://sosig.ac.uk/>)
- ✂ Digital Librarian (<http://www.digital-librarian.com/>)
- ✂ QUEST.net (<http://www.re-request.net/>) Internet Public Library (<http://www.ipl.org/>) BioMedNet (<http://www.bmn.com/>)

### 5.1 The Virtual Library (<http://www.vlib.org/>):

The Virtual Library is the oldest catalogue of the web, started by Tim Berners-Lee, the creator of html and the Web itself. Unlike commercial catalogues, it is run by a loose confederation of volunteers, who compile pages of key links for particular areas in which they are expert; even though it isn't the biggest index of the Web. The Virtual Library pages are widely recognized as being amongst the highest-quality guides to particular sections of the Web. Individual indexes live on hundreds of different servers around the world. A set of catalogue pages linking these pages is maintained at <http://vlib.org>. Mirrors of the catalogue are kept at East Anglia (UK), Geneva (Switzerland) and Argentina. Each maintainer is responsible for the content of their own pages, as long as they follow certain guidelines. The central affairs of the VL are now coordinated by a newly-elected Council.

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## 5.2 Academic Info (<http://www.academicinfo.com/>):

Academic Info, online since 1998, began as an independent Internet subject directory owned by Michael Madin and maintained with the assistance of a quality group of subject specialists. In the spring of 2000 Michael left the University of Washington Gallagher Law Library to focus solely on Academic Info. In 2002 Academic Info became a registered non-profit organization of the State of Washington. Academic Info is now ad-free and relies on donations to remain online. Academic Info aims to be the premier educational gateway to online high school, college and research level Internet resources. The primary focus of the site is academic, with its intended audience at the upper high school level or above. A priority is adding digital collections from libraries, museums, and academic organizations and sites offering unique online content. The current focus is on English language resources but selectively sites in other languages will be considered. Users can search by subjects like The Arts, Biological Sciences, Business, Digital Library, Education, Engineering, Health & Medicine, History, Humanities, Law & Government, Library & Info Science, Religion, Sciences, and Social Sciences.

## 5.3 Librarians' Index to the Internet (LII) (<http://lii.org/>):

The Librarians' Index to the Internet (LII) consists of more than 8,600 Internet resources selected and evaluated by librarians for their usefulness to users of public libraries. Free e-mail subscription to the LII New This Week (<http://www.lii.org/search/ntw>) incorporates most recent resources added to the LII. It has close to 12,000 subscribers in 85 countries. LII also offers co-branding service to the libraries that are members of the Library of California. The site provides both browsing and searching interfaces.

## 5.4 Argus Clearing House (<http://www.clearinghouse.net/>):

The Argus Clearing House is a guide to the meta resources. It provides a central access point for value-added topical guides that identify, describe, and evaluate Internet-based information resources. The Argus Clearinghouse is a non-profit venture run by a small group of dedicated individuals. The Argus Clearinghouse is intended to be a resource that brings together finding aids for students, researchers, educators, and others interested in locating authoritative information on the Internet.

## 5.5 LibrarySpot.com (<http://www.libraryspot.com/>):

LibrarySpot is a free virtual library resource centre for educators and students, librarians and their patrons, families, businesses and just about anyone exploring the Web for valuable research information. LibrarySpot.com aims at breaking through the information overload of the web and bring the best library and reference sites together. Sites featured on LibrarySpot.com are hand-selected and reviewed by an editorial team for their exceptional quality, content and utility. Published by StartSpot Mediaworks, Inc. in the Northwestern University / Evanston Research Park. LibrarySpot is the first in a family of vertical information portals designed to make finding the best topical information on the Internet a quick, easy and enjoyable experience. The LibrarySpot.com has received more than 30 awards and honours. Most recently, Forbes.com selected LibrarySpot.com as a "Forbes Favourite" site, the best in the reference category, and PC Magazine named it one of the Top 100 Web Sites. LibrarySpot.com has been featured on CNN, Good Morning America, CNBC and in many other media outlets.

## 5.6 Galaxy (<http://galaxy.einet.net/>):

Galaxy, originally a prototype associated with the DARPA-funded Manufacturing Automation and Design Engineering (MADE) program, is the oldest browsable / searchable web directory. It is a searchable Internet directory with a mission to provide contextually relevant information by integrating state-of-the-art

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technology with the human touch. Galaxy employs the best of technology and human expertise to organize information in a way that makes it both understandable and highly relevant to users' needs. The information contents of the meta resource is compiled and organized by human Internet Librarians rather than by computer. The Galaxy hierarchy is built utilizing a vertical structure, i.e. the information on particular topics is very deep in content. While other search technologies may yield millions of pages per search (mostly extraneous), Galaxy provides concentrated, relevant results.

#### 5.7 Direct Search (<http://gwis2.circ.gwu.edu/~gprice/direct.htm>):

Direct Search is a growing compilation of links to the Internet resources that contain data not easily or entirely searchable / accessible from general search tools like Alta Vista, Google, or Hotbot. Direct Search has its own search interface.

#### 5.8 BUBL (<http://bubl.ac.uk/>):

BUBL LINK is the catalogue of selected Internet resources covering all academic subject areas and catalogued according to DDC (Dewey Decimal Classification). All items are selected, evaluated, catalogued and described. Links are checked and fixed each month. LINK stands for Libraries of Networked Knowledge. BUBL 5:15 provides an alternative interface to this catalogue, based on subject terms rather than DDC. The aim is to guarantee at least 5 relevant resources for every subject included, and a maximum of 15 resources for most subjects, hence the name 5:15. Big subject areas are broken down into smaller categories. However, the upper limit of 15 is not rigidly applied, so there may be up to 35 items for some subjects. The subject terms used in BUBL LINK / 5:15 were originally based on LCSH (Library of Congress Subject Headings) but have been heavily customized and expanded to suit the content of the service. The aim is to make it very easy to locate Internet information about a large number of subjects. The BUBL LINK catalogue currently holds over 11,000 resources. This is far smaller than the databases held by major search engines, but it can provide a more effective route to information for many subjects, across all disciplines.

#### 5.9 LivingInternet.com (<http://www.livinginternet.com/>)

The mission of this web site is to make comprehensive, in-depth information about the Internet available around the world. The site was developed from 1996 through 1999, posted on January 7, 2000, and is updated weekly. The site is equivalent to a book of more than 600 pages, with more than 2,000 intra-site links and 2,000 external links woven into the text, making it the first Internet publication of a reference work fully integrated with the web on this scale. Google ranks the site number one in the Internet courses category, and Yahoo lists it as one of the top three sites on Internet history.

#### 5.10 Edinburgh Engineering Virtual Library (EEVL) (<http://www.eevl.ac.uk/>)

Edinburgh Engineering Virtual Library (EEVL) is an award-winning free service, which provides quick and reliable access to the best engineering, mathematics, and computing information available on the Internet. It is created and run by a team of information specialists from a number of universities and institutions in the UK for students, staff and researchers in higher and further education, as well as anyone else working, studying or looking for information in Engineering, Mathematics and Computing. EEVL provides a central access point to networked engineering, mathematics and computing information. Resources being added to the catalogues are selected, catalogued, classified and subject-indexed by experts to ensure that only current, high-quality and useful resources are included. They include e-journals, databases, training materials, professional societies, university and college departments, research projects, bibliographic databases, software, information services and recruitment agencies. EEVL, in



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addition to Internet Resource Catalogues, provides targeted engineering search engines - to UK engineering sites, to engineering e-journals and to engineering newsgroups, and to specialized information services, such as the Recent Advances in Manufacturing (RAM) bibliographic database, and the Offshore Engineering Information Service. MathGate at EEVL is involved in the Secondary Homepages Project for UK Mathematics Departments. EEVL's scope is limited to the three subjects, and is therefore more focused than the big search engines. Searching EEVL will retrieve high quality resources, but because EEVL's resources are handpicked, the numbers of sources covered in it are not comparable to the Internet search engines.

#### 5.11 Social Science Information Gateway (SOSIG) (<http://sosig.ac.uk/>)

The Social Science Information Gateway (SOSIG) is a freely available Internet service which aims to provide a trusted source of selected, high quality Internet information for students, academics, researchers and practitioners in the social sciences, business and law. It is part of the UK Resource Discovery Network. The SOSIG Internet Catalogue is an online database of high quality Internet resources. It offers users the chance to read descriptions of resources available over the Internet and to access those resources directly. The Catalogue points to thousands of resources and each one has been selected and described by a librarian or academician. The catalogue is browsable or searchable by subject area. Social Science Search Engine is a database of over 50,000 Social Science Web pages. Whereas subject experts have selected the resources found in the SOSIG Internet Catalogue, those in the Social Science Search Engine have been collected by software called a 'harvester' (similar mechanisms may be referred to as 'robots' or 'Web crawlers'). All the pages collected stem from the main Internet catalogue this provides the equivalent of a social science search engine.

#### 5.12 BIOME (<http://biome.ac.uk/>)

BIOME is a collection of gateways, which provide access to evaluated, quality Internet resources in the health and life sciences, aimed at students, researchers, academics and practitioners. A core team of information specialists and subject experts based at the University of Nottingham Greenfield Medical Library creates BIOME. The Internet resources are selected for their quality and relevance to a particular target audience. They are then reviewed and resource descriptions created, which are stored, generally with the associated metadata, and generally in a structured database. The consequence of this effort is to improve the recall and especially the precision, of Internet searches for a particular group of users. BIOME is a hub within the Resource Discovery Network (RDN) (<http://www.rdn.ac.uk/>), and is funded by the Joint Information Systems Committee (JISC) (<http://www.jisc.ac.uk/>). There are five dedicated subject services (gateways) within BIOME, each covering a specific area within the health and life sciences. These gateways are AgriFor, VetGate, OMNI, Natural Selection and Bio Research.

#### 5.13 The Scout Report (<http://scout.cs.wisc.edu/report/sr/current/>)

The Scout Report is the flagship publication of the Internet Scout Project. Published every Friday both on the web and by e-mail, it provides a fast, convenient way to stay informed of valuable resources on the Internet. A team of professional librarians and subject matter experts select, research, and annotate each resource. Published continuously since 1994, the Scout Report is one of the Internet's oldest and most respected publications. The Internet Scout Project is located in the Department of Computer Sciences at the University of Wisconsin-Madison, and is funded by a grant from the National Science Foundation.

#### 5.14 Internet Public Library (<http://www.ipl.org/>)

The Internet Public Library is a product of the University of Michigan's School of Information and Library Studies. It includes extensive directories of online texts, newspapers, magazines and reference materials;

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plus an exhibit hall and other special sections. At the moment, the home page features links to 4,699 critical and biographical sites dedicated to authors and their works, and an online history of the Harlem Renaissance in New York between 1900 and 1940.

#### 5.15 Digital Librarian (<http://www.digital-librarian.com/>):

Maintained by Margaret Vail Anderson, a librarian in Cortland, New York. Internet information resources are catalogued according to subject categories and format-types. Digital Librarian does not have a search interface for the resources catalogued on the site. It has a browsing interface and see and see also references to related resources.

#### 5.16 QUEST.net (<http://www.re-quest.net/>):

QUEST.net is a free online library offering substantive, fully annotated, links to valuable resources in both a unique frame version and a non-framed version. This web site serves to help students and professionals to locate day-to-day and much needed information and resources in a relatively quick and concise manner. It serves as a one-stop resource directory, providing the Internet community with thousands upon thousands of links, which it's committee of web surfers, have found to be the most useful, informative and productive. The meta resource provides fully annotated description of each link together with its URL allowing visitors to know what to expect from the Web site. Each link has been specially hand picked to provide with the best and most relevant links in each category. This web site is useful in an extraordinary way with it's devoted committee of web surfers work diligently, day-after-day, sorting through the vast galaxies of cyberspace to bring the best and most current resources available.

#### 5.17 BioMedNet (<http://www.bmn.com/>):

BioMedNet is owned by Elsevier Science and is part of the Reed Elsevier group of companies. BioMedNet is the Web site for biological medical researchers. To date there are more than 800,000 members of BioMedNet with more than 20,000 people joining per month. Membership to BioMedNet is free and members can search all of BioMedNet without charge. However, viewing full-text articles from publishers often requires payment or a subscription. The site has links to more than 3500 reviewed information resources. The resource provides online access to more than 15,000 review articles. HMS Beagle: The BioMedNet Magazine is issued every fortnight. The Magazine can be subscribed by e-mail or can be accessed online.

#### 5.18 Other Subject Gateways

##### ✉ Biz/ed - Business and Economics Education on the Internet (<http://www.bized.ac.uk/>):

Biz/ed (<http://www.bized.ac.uk/>) is a free online service for students, teachers and lecturers of business, economics, accounting, leisure and recreation and travel and tourism. The gateway contains a ROADS based Internet catalogue with over 1400 Internet resources selected and described by subject experts.

Biz/ed is targeted at students and teachers in the post-16 education sector, covering schools, FE colleges, universities and beyond. The site offers support for economics, business, accounting, leisure and recreation and travel and tourism at many different levels including AVCE, AS and A2 level, International Baccalaureate, HNC, HND and MBA.

The Biz/ed site is a unique combination of primary and secondary teaching and learning resources. Resource discovery is integrated with simulations, worksheets, glossaries, spreadsheets, resource databases, online chat with examiners and a series of Virtual Worlds to give a rich package of support for teachers, lecturers and students.

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✎ National Maritime Museum's Port (<http://www.port.nmm.ac.uk/>)

Port is the National Maritime Museum's subject gateway to maritime information from the Internet. Subject gateways provide access to searchable and browseable catalogues of Internet based resources, all of which have been quality controlled or assessed before inclusion on the site. Librarians at the National Maritime Museum are actively involved in cataloguing and recording quality controlled online resources for Port.

The information on Port has been grouped into twenty subject headings. To make Port easier to browse and to search, each subject heading divides into specific groups of information, improving accessibility for researchers. An example of this is the hierarchical structuring of Conflicts at sea, in which refined tiers of information on naval and military history lead users to subject-specific information on battles and wars, such as World War Two, followed by resources on D-Day.

All websites included in the gateway are catalogued in records that assess the resource's content, origin, and nature. This means that users can access Port in the knowledge that they are looking at a quality-controlled collection of resources. When you use Port to locate online resources you know that it has the professional qualities and rigorous standards usually associated with such an institution as the National Maritime Museum.

✎ OMNI - Organising Medical Networked Information (<http://www.omni.ac.uk/>)

OMNI (Organising Medical Networked Information) is a gateway to evaluated, quality Internet resources in health and medicine, aimed at students, researchers, academics and practitioners in the health and medical sciences. OMNI is created by a core team of information specialists and subject experts based at the University of Nottingham Greenfield Medical Library, in partnership with key organisations throughout the UK and further a field. OMNI, also provides training materials and workshops. Browsing can be done via either alphabetical topics, classified topics, or via MeSH headings. In addition, OMNI provides a range of biomedical value-added services, including a MEDLINE review section, mirrors of key NHS IT strategy documents, and the UK CME database.

OMNI is one of the gateways within the BIOME service (<http://biome.ac.uk/>). BIOME is part of the Resource Discovery Network (RDN) <http://www.rdn.ac.uk/>, and is funded by the Joint Information Systems Committee (JISC).

✎ ICSU Navigator for Primary Scientific Publications (<http://eos.wdcb.ru/icsu/navigator/navy.htm>):

The main goal of this project-to create representative source of information on the primary scientific publications in all disciplines covered by the International Council for Science (ICSU).

The database basically will include descriptions of and links to materials, which are considered as primary scientific publications, i.e. scientific journals, serials and other relevant publications, which are published or approved by ICSU bodies as publications containing real science. The latter is the main criteria for including a publication into the ICSU Navigator database. The ICSU Press recommended focusing the proposal in more narrow scientific areas and soliciting support and advice from the relevant Unions. The recommended areas are Geophysics (with further transition to Earth Sciences) and Physics.

## 7. Conclusion

Gateways, in every discipline and subjects help the users in Academic Libraries where the thrust is on cutting edge technologies. Gateways serve as a ready reference tool. It is hoped that this compilation will be useful to the departmental needs. While studies of such nature can never be all comprehensive and complete, attempts should be made to narrow down on the resources and services, thus helping the users. Updating of resources in such compilations are absolutely necessary, only then will this gateway be of importance and relevant.

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### About Author



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